Solicitation and Proposal Review

INPUT

Overview

- A major undertaking
- Minimal evaluation guidance
- Role of scenarios
- Litton's response

Overview

- Labor rates too high
- Exorbitant subcontractor rates
- Labor mix on scenarios
- Potential for gamesmanship

RFP Review—Key Points

- Actual travel, not JTRs
- Retainage of 25%
- Multiple contract awards
- Scattered themes
  - AFLC environment
  - Mission management
  - Flexible contractor response

RFP Review—Key Points

- Muddied evaluation
  - Scenarios
  - Risk analysis
  - Role of cost
  - Binary versus graduated

INPUT

RFP Review—
Indicated Response

- Attention to themes
- Attention to key words
- Gamesmanship indicated
  - On subcontractors
  - On scenarios
  - On labor mix

RFP Review—Indicated Response

- Diverse commercial and federal practices
- Uncompensated overtime
- Strong expertise in multiple areas
- Innovation and creativity
- First in technical—second in cost

Proposal Review—Volume 1

- Better quals mapping
- Heavier staff support
- Livelier, briefer graphics

Proposal Review—Volume 2

- Still better quals mapping needed
- Equal work for equal weight
- Slightly disorganized sections
- No personnel matrix

Proposal Review—Volume 3

- Inadequate response to surge requirement
- More cross-referencing needed
- Better explanation of subcontractor selection

Proposal Review—Volume 3

- Scenarios
  - Too high a dependence on expert labor
  - More theming and key words needed
  - More tailored solutions needed
  - More consistency required
  - Greater reliance on software and forms
  - Better graphics
  - Better discussion on Scenario 4

INPUT

Proposal Review—Volume 4

- Overall rates too high
- Subcontractor rates unacceptable
- Better gaming needed
- Uncompensated overtime
- Possibly different overhead structures

Proposal Review—Volume 4

- Teaming selection
    - Insufficient explanation
    - Damaging rates
    - Lack of body shops

INPUT

Proposal Review—Key Themes

- More tailored solutions
- Better labor mix
- Lower priced subcontractors
- Tighter cross-referencing
- More sizzling graphics

Minimizing Proposal Costs

Three Types of Proposal Costs

- Bid and proposal costs
- Actual incremental costs
- Professional burnout costs

Bid and Proposal Costs

- Negotiated annually with DCAA
- Reportable on time sheets
- Includes proposal-related ODCs
- Never enough

Actual Incremental Costs

- Other time sheet charging
- Lost opportunity costs
- Overhead charges supporting proposal development in a general way
- Additional recruitment due to attrition

Professional Burnout Costs

- Lowered productivity and effectiveness
- Growing morale problems
- Continued high attrition (40% or more)
- Fulfillment problems and overruns

Minimizing Costs

- Fewer bids
- Proposal data base
- Proposal support factory
- Proposal development
- Proposal organization

INPUT

Bid/No-Bid Decision

- Funding
  - Current
  - Future
  - Risk level
- Pre-positioning
  - Direct, personal contact
  - Level of influence
  - Prospect viewpoint

Bid/No-Bid Decision

- Agency selection history
  - Fair and open
  - Pro-Litton bias
  - Consistency in criteria
- Potential schedule slippage
  - Pros and cons
  - Impact on other work
  - Impact on staff coverage

Bid/No-Bid Decision

- Hot buttons
  - Cost
  - Technical
  - Key people
- Familiarity with tasks
  - Incumbent work
  - Similar work

Bid/No-Bid Decision

- Demonstrable Litton strength
  - Corporate
  - Individual
- Teaming feasibility
  - To cover experience gaps
  - To lower rates

Bid/No-Bid Decision

- Competition
  - Who: strengths and weaknesses
  - Ghosting the competition
  - Price competitiveness
  - Why is Litton better suited?

Bid/No-Bid Decision

- Evaluation
  - Price shootouts
  - Level of criteria understanding
  - Feasibility of gamesmanship
- Motivation to bid
  - Need to keep staff covered
  - Need to increase profit
  - Need the qual
  - Need to shut out competition

Proposal Data Base

- Objectives
  - 80%-90% prewritten
  - Costs hit overhead, not B&P
  - Minimal out-of-pocket costs
  - Quick-response capability
  - Minimal staff drain

Proposal Data Base

- Contents
  - Cameos on all proposals
  - Quals (corporate and personal) on all proposals
  - Up-to-date skills data base
  - Key-word index on every proposal

Proposal Data Base

- Audit trail
  - What won (or maxed out technically)
  - What lost and why
  - Debriefing details
    - Every Litton loss
    - Every competitor win (FOIA the contract)
    - Other competitive data

Proposal Support Factory

- Paid from overhead, not B&P
- Maintain the data base
- Copies of all proposals
  - Litton's and winning competitors'
  - Hard copy and diskette

Proposal Support Factory

- Logos for all agencies
- Knowledgeable person(s) to locate material
- Graphics expert
- Probably not proposal writers

Proposal Development

- Proposal/manager develops
  - Detailed proposal outline
  - Detailed schedule
  - Detailed staffing for proposal effort
  - Clear delineation of
    - New material to write
    - Old material to recycle

Proposal Development

- Ongoing management
  - Adhere to schedule at all costs
  - Revise plan as
    - New material is located
    - Government changes things
  - Continuous quality control
- Minimize churning by red, blue, black, or whatever term

INPUT

Proposal Development

- Sections built independently
- Never rekey anything—minimize clerical B&P
- Maximize corporate integrity on B&P costs

Proposal Organization

- Fully spread the wealth
  - Practically everyone participates
  - Rarely contribute more than 5 hours/week
  - Everyone becomes a stakeholder
- Work at home, on own time
- Fully matrix-oriented
- A part of the job

Conclusion

- Top management commitment
- Continuing overhead investment
- Maximum participation
- Possibly a culture change

Maximizing Proposal Score

Acquisition Environment

- Scope of work
  - Often poorly defined
  - Not representative of client needs
- Limited communication after issuance
- Highly competitive (usually)

Acquisition Environment

- Short response cycle
  - Rarely enough time
  - Conflicting priorities
- Evaluation confusion
  - Technical and cost
  - Pre-established criteria
  - Trivial/emotional issues

Acquisition Environment

- Multiple technical cuts
  - Competitive range
- Evaluation team members
  - Less than competent
  - Less than knowledgeable
  - Often apathetic

Acquisition Environment

- Evaluation constraints
  - Officially limited to written proposal
  - Reputations, without examples, don't count
- Long lead time
  - Complicates staff planning

Acquisition Implications

- Pre-positioning
  - Early client contact
- High-quality proposal
- Demonstrate in-depth knowledge
  - Apply concept to client's problem

INPUT

Acquisition Implications

- Detailed, specific work statement
- Key personnel committed to effort
  - Effects on other program
- Size of award justifies
  - Investment in time
  - Investment of resources

INPUT

Proposal Planning Guide

- Purpose
  - Think out the proposal
  - Plan the effort
  - Avoid wasting resources
  - Feedback from senior management

INPUT

Proposal Planning Guide

- Proposal schedule
  - Graphics
  - Draft sections
  - Red team review
- Theming and key factors
- Detailed proposal outline
  - With responsibilities defined

Proposal Planning Guide

- Key word list
- Project organization chart
- Proposed personnel and why
- Referenced engagements
- Personnel skills matrix

Proposal Planning Guide

- Quals matrix
- High-level work plan schematic
  - With details coming later
- Exhibit list
  - Maximize the graphics
- List of specific RFP requirements
  - Answer the mail

INPUT

Normal Proposal Content

- Always follow RFP guidelines
- Section 1: Executive Summary
  - A sales document, not a summary
  - Different paper
  - Sometimes separately bound
  - Kept under ten pages

Normal Proposal Content

- 1.1 Purpose of the support/project
  - Begin with punch
  - Focus on program, not Litton
  - Identify bottom-line objectives

- 1.2 Introduction to Litton
  - Primarily boilerplate
  - Minimal tailoring
  - Dare to be different, even if risky
  - No more than one page

Normal Proposal Content

- 1.3 Highlights of Litton's strengths (themes)
  - Choose what we want to sell
  - Begin to change minds (if appropriate)
  - Avoid redundancy

- 1.4 Proposal overview
  - Tied to agency requirements
  - Tied to evaluation criteria

- 1.5 Conclusion
  - One short paragraph
  - Drive home what we sold

INPUT

Normal Proposal Content

- Section 1 tips
  - Written prior to proposal initiation
  - Summarize key themes and strategies
  - Highlight: format, texture, color
  - Address all evaluation criteria
  - Reference body of proposal
  - Sell

Normal Proposal Content

- Section 2: Understanding
  - Set up the technical approach (next section)
  - Identify bottom line—what the client will get
  - Stay goal-oriented, not process-oriented
- 2.1 Purpose of support sought/project
  - Be specific

INPUT

Normal Proposal Content

- 2.2 Client organization
  - In general
  - How it applies to project
- 2.3 Understanding the technical environment
  - Current system: hardware and software
  - Status of project
  - Technical issues

Normal Proposal Content

- 2.4 Understanding the functional environment
  - Key process issues
  - Problems facing client
  - Impact of system deficiencies

- 2.5 Potential solutions
  - To be fleshed out in next section

- 2.6 Understanding of governing policies/directions/guidelines

Normal Proposal Content

- Section 2 tips
  - Demonstrate our knowledge to client—his problem, environment, etc.
  - Be specific, research the project
  - Don't rely on personnel/corporate quals
  - Don't plagiarize the RFP

Normal Proposal Content

- Section 3: Technical Approach
  - Say how we will do it
  - Emphasize goals, not just process

- 3.1 Key factors influencing our approach
  - Based largely on Section 2

- 3.2 Methodologies
  - Emphasize technology and forms
  - Be careful of commitments

Normal Proposal Content

- 3.3 Technical plan
  - Workplan schematic(s)
  - Sometimes multiple levels
  - Tells the what, not the how
  - Use a PERT for task interrelationship
- 3.4 Delivery schedules
  - Milestone chart
  - Possibly resource plan also

Normal Proposal Content

- Section 3 tips
    - Highlight key factors (themes) early
    - Never use boilerplate in technical plan
    - Specifically address client's tasks
    - Embed assumptions/caveats/constraints in text
        - Don't group in one big list
    - Prepare detailed schematics before writing text

Normal Proposal Content

- Section 3 tips (continued)
  - If possible, follow client's task structure
  - Parallel initial cost estimate with technical approach
  - Embed specific client knowledge into technical approach
  - Provide detailed milestone chart
  - Include staff hour estimates

INPUT

Normal Proposal Content

- Section 4: Project Management
  - Largely boilerplate
  - Tailored to problem at hand
  - Lots of graphics
- 4.1 Key factors influencing project organization
  - Many standardized themes
  - Continue themes from earlier section

Normal Proposal Content

- 4.2 Proposed organization
  - Organization chart
  - Roles/responsibilities
  - Cameos
- 4.3 Project management approach
  - Virtually all boilerplate

INPUT

Normal Proposal Content

- Section 4 tips
  - Continue the themes
  - Select PM known to clients (but not REMIS)
  - Project control and oversight
  - Appropriate technical advisors (vague on hours commitment)
  - Appropriate organizational forms (functional teams)

INPUT

Normal Proposal Content

- Section 4 tips (continued)
  - Mix project staff, based on
    - Client knowledge
    - Functional skills
    - Technical experience
- Specifically tailored cameos

Normal Proposal Content

- Section 5: Personnel Qualifications
  - Client is buying people with expertise
  - Need to present a balanced team
  - Some game playing possible
- 5.1 Key factors influencing people selection
  - Continue key words and theming

Normal Proposal Content

- 5.2 Overview of the proposed team
  - Skills matrix
- 5.3 Cameos
  - With key words
- 5.4 Resumes
  - Tailored to proposal

Normal Proposal Content

- Section 5 tips
  - Utilize buzz word list
  - Emphasize evaluation criteria
  - Highlight strongest skills
  - List most skilled staff first
  - Follow matrix in order and emphasis
  - Project manager most critical

Normal Proposal Content

- Section 6: Corporate Quals
- 6.1 Introduction to Litton
  - Corporate history
  - High tech firm
  - Emphasize IRM
- 6.2 Synopsis of key quals areas
  - 3-5 engagements/area
- 6.3 Detailed quals

Normal Proposal Content

- Section 6 tips
  - Synopsis areas parallel evaluation criteria
  - Qual synopses should be tailored
    - Key words
    - Evaluation criteria
  - Use only applicable quals

Cost Proposal

- Rate control
  - Labor mix
  - Subcontractor mix
  - Uncompensated overtime
  - Multiple cost centers
  - Multiple benefits structures
- Place in evaluation
- Covered in other briefings

Evaluation Environment

- Cost versus technical mix
  - Priority order
  - Relative weights
- Cost evaluation alternatives
  - Against an objective standard
  - Relative to other evaluations
  - Example/case study

Evaluation Environment

- Technical/evaluation alternatives
  - Globally binary
  - Modularly binary
  - Subjective
    - Against a standard
    - In comparison with other proposals
  - Example/case study

Conclusion

- Prerequisites for successful proposal
  - Right project manager
  - In-depth program/functional knowledge
  - Marketing and preselling
  - Client agency understanding
  - Knowledge of available funding
  - Good quals
  - Detailed/specific technical approach

Conclusion

- Guidelines
  - Be client-centered
  - Demonstrate knowledge and understanding
  - Demonstrate tools/methodologies/discipline
  - Provide detailed workplan
  - Define organizational approach
  - Define project control procedures

Conclusion

- Guidelines (continued)
  - Specifically address evaluation criteria
  - Repeat key phrases and points
  - Work the themes
  - Assume evaluators are intelligent but uninformed
  - Be logical, consistent, and organized

Conclusion

- Guidelines (continued)
  - Start early
  - Invest time in
    - Planning
    - Strategizing
    - Theming
    - Just plain thinking
  - Be creative and different
  - Analyze our strengths—and apply them

Conclusions

- Guidelines (continued)
  - Understand our weaknesses
    - Overcome them if possible
    - Otherwise, hide them
  - Team as appropriate
    - Especially to lower rates
  - Know contract office/client
  - Put personality into it
  - Organize around criteria and key words

Federal Professional Services Market Trends

Professional Services Environment

- SETA type contracts
- Multiple awards
- Market analysis and forecast
- Federal user requirements and trends
- Competitive trends

SETA Type Contracts

- Sometimes called task orders
- Sometimes called BOA contracts
- 45 in PAR data base
  - None off-site only
- CBD announcements in 1990
  - BOAs: 24
  - Task order: 15
  - Multisource: 2

SETA Type Contracts

Agency	On-Site	Both	Total
Air Force	2	3	5
Army	1	3	4
Navy	4	1	5
Marines	1	1	2
DCAA	0	1	1

SETA Type Contracts

Agency	On-Site	Both	Total
Commerce	1	2	3
HHS	0	1	1
Interior	1	2	3
State	1	0	1
Justice	3	2	5
Transportation	1	2	3

SETA Type Contracts

Agency	On-Site	Both	Total
Treasury	2	2	4
Education	0	1	1
GSA	0	3	3
NASA	2	0	2
EPA	0	1	1
U.S. Courts	1	0	1
Total	20	25	45

INPUT

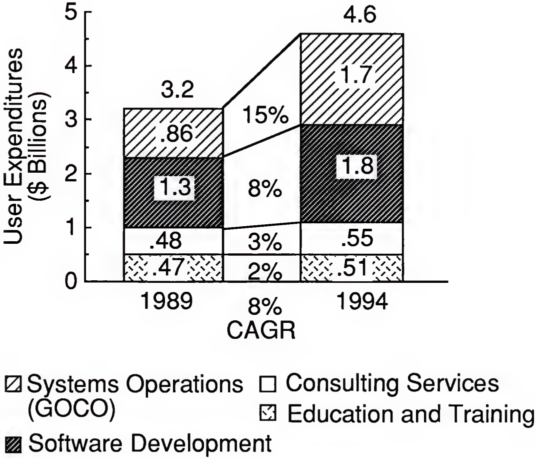
Multiple Awards

- Approximately 20% of total
- Includes all GSA contracts
- Others in DoD
- Currently, VA has multiple contract

Federal Market Pressures

- Improve productivity
- Technical staff shortage
- Budget deficit

Professional Services Market



Totals may vary due to rounding

Federal Government Agency Professional Services Budgets GFY 1988-1989

$ Millions						
Consulting, Education & Training		Software Development		Operations & Maintenance		
1988E	1989F	1988E	1989F	1988E	1989F	Agency
9	7	33	22	59	65	Agriculture
15	12	14	12	61	67	Commerce
1	2	5	9	30	31	Education
3	35	252	265	214	234	Energy
115	235	290	311	46	42	GSA
16	18	62	58	79	85	HHS
<1	<1	17	30	15	19	HUD
6	4	21	18	39	43	Interior
4	6	16	16	89	100	Justice

E: Estimated
F: Forecasted

Federal Government Agency Professional Services Budgets GFY 1988-1989

$ Millions						
Consulting, Education & Training		Software Development		Operations & Maintenance		
1988E	1989F	1988E	1989F	1988E	1989F	Agency
1	1	12	12	29	22	Labor
32	34	319	362	318	352	NASA
1	1	13	14	22	25	State
4	3	42	45	43	51	Transportation
7	7	27	28	146	163	Treasury
25	25	462	469	306	362	Air Force
23	24	217	199	333	365	Navy
35	35	216	212	280	352	Army
5	5	6	7	25	28	DLA

E: Estimated
F: Forecasted

Budgetary Influences

- Yearly funding approval
- National budget deficit
- Political sensitivities

Federal Agencies' Software Requirements

- Portable
- Engineering technologies
- High-level development tools
- Analytic tools

Key Application Areas

- Administration and logistics
- Data management
- Financial
- Information systems
- Office automation

Uses of Artificial Intelligence in Federal Agencies

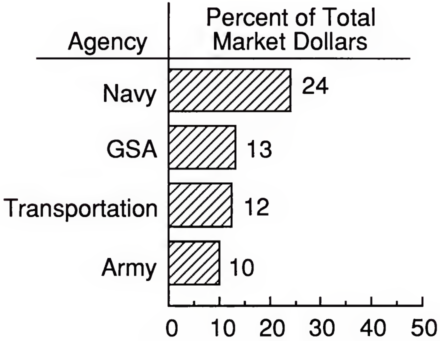
- Expert systems for software development and decision support
- Training
- Prototype systems
- Information systems management

INPUT

Uncertainties/Issues Affecting the Federal Professional Services Market

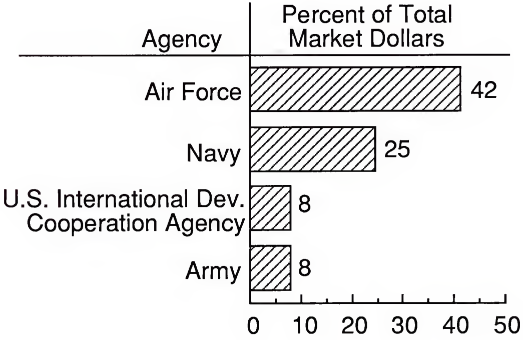
- Increases in DPAs and MOLs
- MASCs policies
- Industry mergers and acquisitions
- Fraud and liability laws
- Other legal issues
- GSA Go for 12 program
- GSA Trail Boss program
- Downsizing of procurements
- Congressional preferences

Federal Government Professional Services Top-Four Agency Users, GFY 1988 Service Category: Software Development



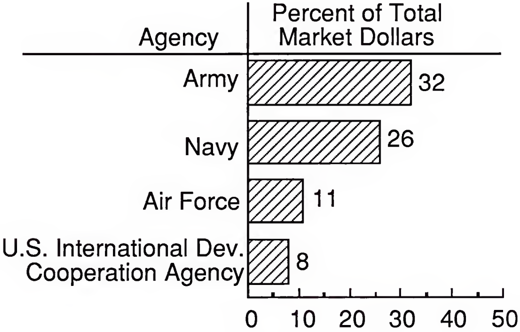
Source: Ziff-Davis Pinpoint, 1989, GFY88

Federal Government Professional Services Top-Four Agency Users, GFY 1988 Service Category: Consulting Services



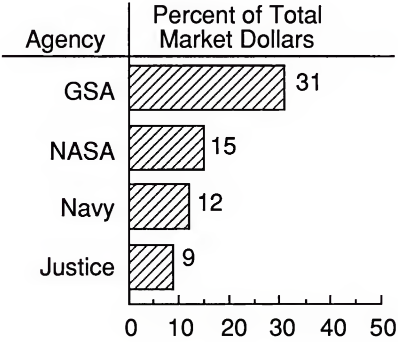
Source: Ziff-Davis Pinpoint, 1989, GFY88

Federal Government Professional Services Top-Four Agency Users, GFY 1988 Service Category: Education and Training



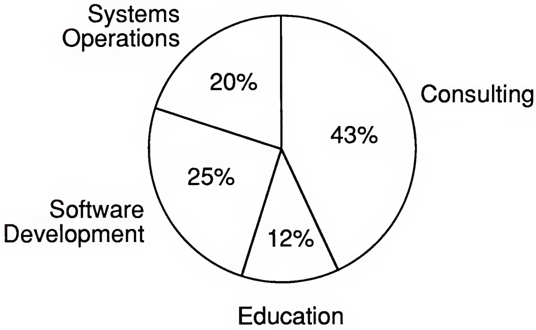
Source: Ziff-Davis Pinpoint, 1989, GFY88

Federal Government Professional Services Top-Four Agency Users, GFY 1988 Service Category: Systems Operations



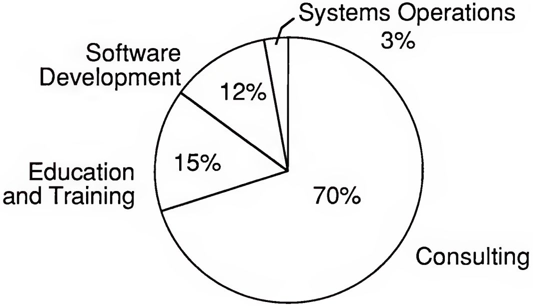
Source: Ziff-Davis Pinpoint, 1989, GFY88

Professional Services Budget Distribution by Service Category Civil Agencies



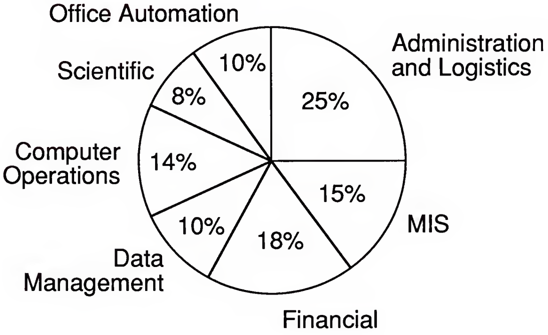
Source: Ziff-Davis Pinpoint, 1989, GFY88

Professional Services Budget Distribution by Service Category Defense Agencies



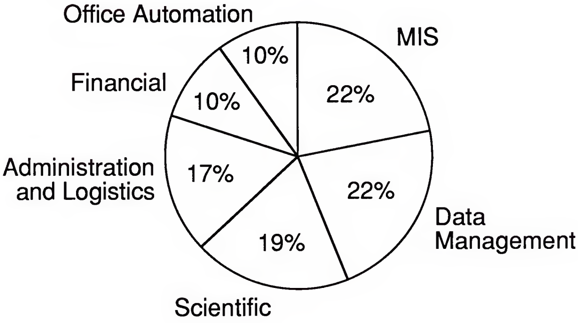
Source: Ziff-Davis Pinpoint, 1989, GFY88

Federal Government Professional Services Application Areas Civil Agencies



Updated 1987

Federal Government Professional Services Application Areas DoD Agencies



Updated 1987

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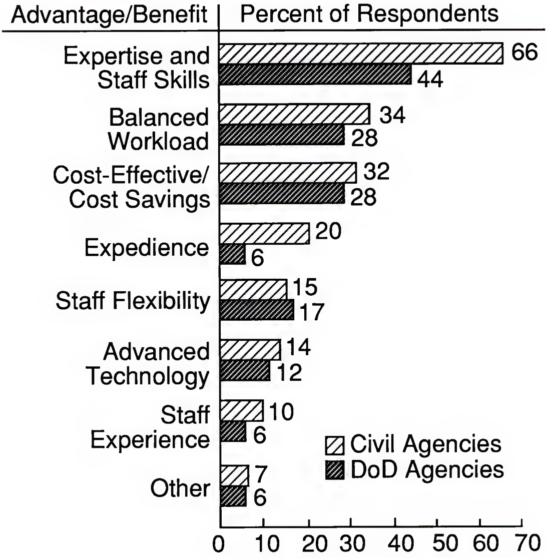
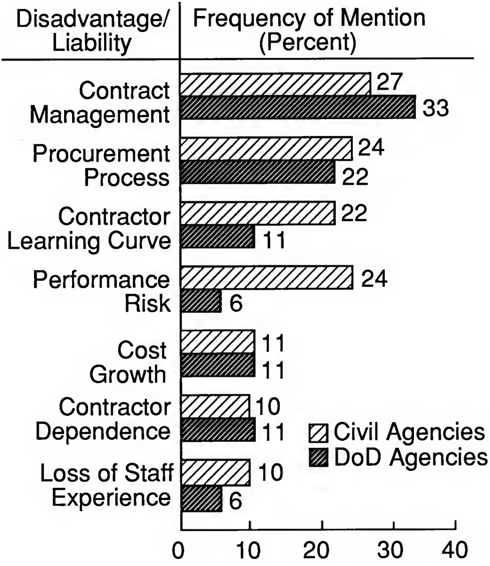
Agency Views of Advantages/Benefits of Professional Services



Updated 1987

Agency Views of Disadvantages/Liabilities of Professional Services



Updated 1987

Rankings of Characteristics of Successful Contractors

Characteristic	Ranking*		
	Civil Agencies	DoD Agencies	Vendors
Price	2	$\boxed{1}$	$\boxed{1}$
Support	4	4	⑦
Staff Experience	$\boxed{1}$	5	2
Software Development Experience	3	$\boxed{1}$	3
		3	6
Application/ Functional	4		
Experience		⑦	4
Federal Contract	6		
Experience		5	4
Agency Experience	⑦		

* Ranking: 1 = Most Important (□), 7 = Least Important (○)
Updated 1987

VLI1-JK4-26

INPUT

Agency Ratings of the Characteristics of a Successful Professional Services Contractor

Characteristic	Importance Ratings *		
	Civil Agencies	DoD Agencies	Vendor Perception
Price	3.9	4.2	4.5
Support	3.7	3.4	3.0
Staff Experience	4.0	3.2	3.9
Software Development Experience	3.8	4.2	3.7
Application/ Functional Experience	3.7	4.0	3.4
Federal Contract Experience	2.9	3.0	3.6
Agency Experience	2.7	3.2	3.6

* Ratings based on 1-5 scale; 5 = most important and 1 = least important

Updated 1987

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VLI1-JK4-27

Relative Ranking of Criteria Used in Selecting a Professional Services Vendor

Selection Criteria	Ranking
Proposed Technical Solution	1
Vendor Reputation	2
Staff Experience	3
Cost	4
Project Management	5

Updated 1988

Federal Agency Vendor Type Preference for Professional Services

Vendor/ Organization Type	Percentages	
	Civil Agencies	DoD Agencies
Mainframe Manufacturer	16	15
Professional Services Company	55	69
Not-For-Profit	9	8
Software Products Vendors	20	8
Total	100	100

Updated 1987

INPUT

Federal Agency Contract Type Preference for Professional Services

Contract Type Preference	Percent of Respondents	Reasons Cited
Cost-Plus	6	Research-oriented/ developmental services
Cost-Plus Incentive Fee	30	Nonspecific requirements Innovative/creativity More valuable to agency
Fixed-Price	30	Requirements well defined Reduce government liabilities Government retains control
Mixed/Other	34	Depends on type of service Time and materials gives flexibility

Updated 1988

Change in Agency Use of Basic Ordering Agreements (BOAs)

Change in BOA Use	Percent of Respondents
Increasing	67
Decreasing	17
Remaining the Same	8
Little Experience	8

INPUT

VLI1-JK4-31

Agency Plans for Conversion of Current Professional Services and Support

Planned Conversion	Percentages	
	Civil Agencies	DoD Agencies
From Contractor to In-House Staff	24	30
From In-House Staff to Contractor	51	60
No Conversion Plans	25	10
Total	100	100

Updated 1987

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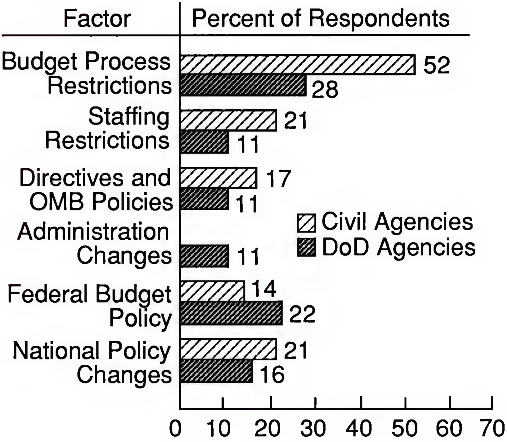
Agency Views of Factors Impacting Future Use of Professional Services



Updated 1988

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VLI1-JK4-33

Technological Factors Affecting Future Government Spending for Professional Services

Factor	Civil Agencies Rank*	DoD Agencies Rank*
Evolution in use of personal computers	1	1
Developments in software development and maintenance	2	4
Improvements in end-user capabilities	3	5
Changes in microcomputer architecture	4	2
Proliferation of LANs	5	3

* Rank based on frequency of mention by respondents.

Updated 1987

Top-Five Federal Government Professional Services Vendors
1988

Vendor	Rank*
Computer Science Corp.	1
Unisys	2
SAIC	3
TRW	4
CDSI	5

* Based on Federal Contract Award Data for GFY88 and information from vendors.

Types of Professional Services Provided by Respondents

Category	Proportion of Respondents		Average Percent of Respondent Revenues
	Currently Providing (Percent)	Plan to Provide (Percent)	
Consulting Services	92	100	29
Education and Training	75	83	5
Software Development	92	100	30
Systems Operations	42	67	22

Updated 1988

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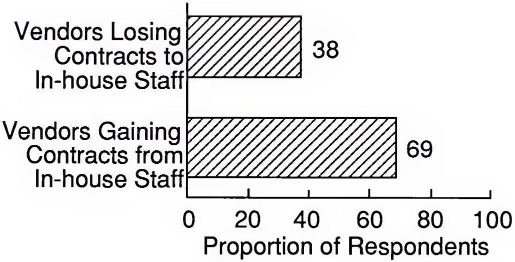
Professional Services Competition from In-House Government Staff



Note: Total exceeds 100% because the results were not mutually exclusive.

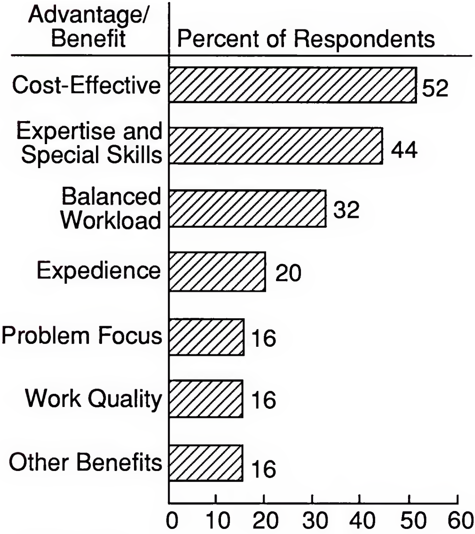
Updated 1988

Source of Follow-On Support for Professional Services Contracts

Source of Follow-on Support for Completed Professional Services Contracts	Proportion of Respondents (Percent)
In-House by Government	8
Outside Agency by Original Vendor	77
Outside Agency by Another Vendor	15
Total	100

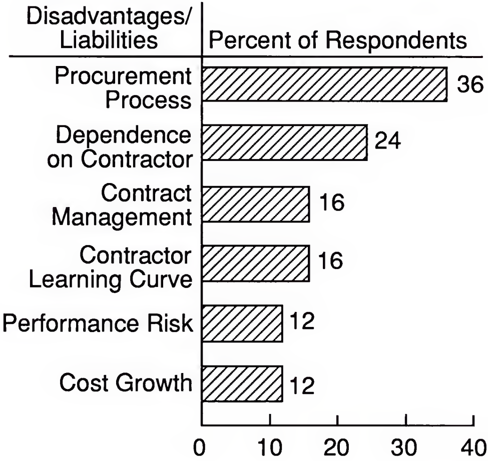
Updated 1988

Vendor Views of Advantages/Benefits of Professional Services



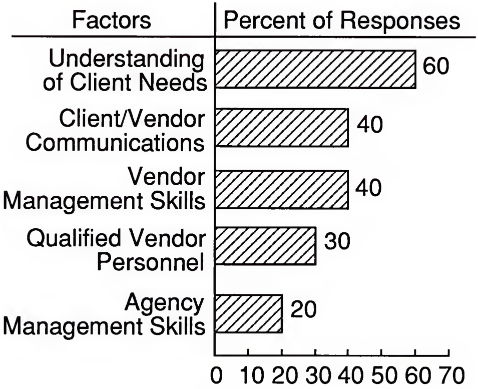
Updated 1987

Vendor Views of Disadvantages/Liabilities of Professional Services



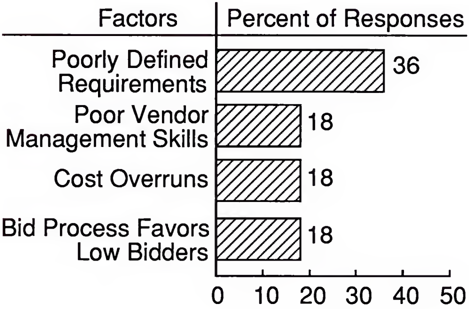
Updated 1987

Factors Contributing to Satisfactorily Performed Contracts



INPUT

Factors Contributing to Poorly Performed Contracts



INPUT

Government versus Commercial Market Differences

Market Differences		
Federal Market	Commercial Market	Rank*
Greater price sensitivity	Less price sensitivity	1
Complex acquisition process	Simpler purchasing procedures	2
Wider range of evaluation criteria	Narrower basis for award	3
Lengthy phased development cycle	Shorter-term evolution	4
Subject to greater legal and economic constraints	Less rigid legal and economic constraints	5

*Rank based on frequency of mention by respondents.

Updated 1988

INPUT

Vendor Preference for Contract Type for Professional Services

Preferred Contract Type	Percentages	
	Vendors	Agencies
Cost-Plus/Cost-Plus Incentive Fee	23	$\boxed{36}$
Fixed-Price	$\boxed{47}$	30
Mix	23	24
Other	7	10

Rating: ☐ = Most preferred.

Updated 1988

Vendor Perception of SETA Contracting for Professional Services

Perception	Percent of Respondents	Reasons
Best Contracting Vehicle	25	• Flexible
Poor Contracting Vehicle	25	• No access to high-level skill sets
No Opinion	50	

INPUT

Vendor-Expected Change in Contracting for Professional Services

Professional Services Category	Percent of Respondents: Expected Increase	Percent of Respondents: Expected Decrease	Percent of Respondents: No Change	Average Change* (Percent)
Consulting Services	46	8	46	30
Education and Training	31	—	69	7
Software Development	38	8	54	30
Systems Operations	39	—	61	25

* Change over the next five years, GFY 1988-1992.

Updated 1988

INPUT

Rankings of Factors Affecting Future Government Spending for Professional Services

Factor	Rank*	Positive or Negative Effect
Budget Changes (Authorization, Appropriation, Apportionment)	1	Negative
Government Personnel Availability	2	Positive
Regulatory Policy Changes	3	Positive
Price	4	Negative

* Rank based on frequency of mention by respondents.

Updated 1988

Current and Planned Vendor Qualification in Ada

Status	Percent of Respondents
Vendors currently qualified in Ada	67
Vendors planning to become qualified	19
Vendors with no current plans for Ada	14
Total	100

Updated 1988

Vendor Ranking of Technological Factors Affecting Future Government Spending for Professional Services

Factor	Rank*
Increase in optical disk storage capabilities	1
Developments in artificial intelligence	2
Standardization efforts	3
Developments in interface capabilities	4
Increase in use of supercomputers	5
Telecommunications developments	6
Increased use of fiber optics	7

*Rank based on frequency of mention by respondents.

Updated 1988

Recommendations

- Maximize pricing strategies
- Comply with new federal standards
- Vertically penetrate agency customers
- Maintain positive reputation
- Direct marketing efforts to reflect political emphasis on programs
- Capitalize on specialized expertise
- Target markets

Corporate Organizational Philosophies

Overview

- Introduction
- Firm characteristics
- Six questions
- Conclusions

Introduction

- The problem
  - Approaching the federal market
  - Keeping the staff covered
  - Making maximum use of resources
  - Winning the business

- Solution alternatives
  - Centralized versus decentralized
  - Functional versus target versus matrix
  - Dedicated proposal entity
  - Attention to career path

INPUT

Introduction

- Data collection
  - Two page questionnaire
  - Eight questions (six on this subject)
  - Telephone survey
  - Concentrated on client base
  - Continued barter arrangement
  - 25 surveys completed

Firm Characteristics

- All provide professional services
- Primary focus
  - Hardware: 4
  - Software: 6
- Professional services (includes systems integration): 15

INPUT

Firm Characteristics

- Other factors
  - Aerospace firms: 4
  - Active integrators: 8
  - Telecom-oriented: 4
- Company size range
  - Large 8(a) firm
  - Multibillion dollar companies

Question 1

In general, how is your company organized to support the federal market?

- By target agency
- By functional offering
- Matrix management
- Other

Comments ______________________________

INPUT

Question 1
Summary Results

- Matrix: 20
  - Alone: 10
  - With functional: 2
  - With target: 1
  - With both: 7
- Functional (alone): 0
- Target (alone): 4
- Other: 1

Question 1
Comments

- By geographic area (within government division): two responses
- Combination
  - Sales by agency
  - Support by function
  - Sources matrixed across company
- Proposal efforts pull in resources from throughout company
- Headquarters staff matrixed to field for proposal development

Question 1
Conclusion

- Matrix management is unavoidable
- Only way to assemble internal team with necessary quals
- Recognition of complexity in supporting federal market

Question 2

Do you have a separate organization dedicated to:

	Yes	No
• Writing proposals	___	___
• Supporting proposal writing	___	___
• Supporting project fulfillment	___	___

Comments ______________________________

Question 2
Summary Results

	Yes	No	Both
Writing proposals	16	9	0
Support proposal writing	20	5	0
Support project fulfillment	14	9	2

Question 2
Comments

- Decision depends on scope of project
- Decision depends on resource availability
- Approach may change as organization grows
- All three functions in same organization

INPUT

Question 2
Conclusions

- Centralized proposal writing is surprisingly common
- Only three companies answered "No" to first two questions
  - Two professional services
  - One software
  - All small companies

INPUT

Question 3

How do you approach the federal market in terms of:

	Centralized	Decentralized
• Project fulfillment	________	________
• Bid/no-bid decisions	________	________
• Proposal development	________	________

Comments ________________________________

Question 3
Summary Results

	Project Fulfillment	Bid/ No-Bid	Proposal Development
Centralized	11	18	18
Decentralized	12	5	5
Both	2	1	1
Other	0	1	1

INPUT

Question 3
Comments

- Centralized within Washington field office
- Three branches for proposal development
  - DoD
  - NASA
  - Other Civilian
  - Each group leader assembles proposals
- Proposal reviews are always centralized

INPUT

Question 3
Comments (Cont.)

- Proposal manager responsible for fulfillment
- Contract administration supports fulfillment
- Bid/no-bid: a democratic method
- Operational head decides bid/no-bid
- Operational units support fulfillment
- One person writes proposal (an 8(a) firm)

Question 3
Conclusions

- Surprises
  - High number of centralized fulfillment—not just hardware firms
  - Five decentralized bid/no-bid decisions
- Confirms previous question on proposal development

Question 4

How, if at all, do these approaches affect the relationship between headquarters and field staff?

Question 4
Strengthen Relationship

- Natural split of HQ/field responsibility
  - Long-term versus short-term
  - Avoids micromanagement

- Field autonomy strengthens relationship

- Strong field staff
  - Strengthens entrepreneurial spirit
  - Appropriate rewards and punishments

INPUT

Question 4
Weaker Relationships

- Headquarters does not understand field
  - "Blissful ignorance" of what we do
- Field on its own cannot get support
- Contention over priorities

Question 4
Weaker Relationships

- Frequent delays in bid/no-bid decisions
- Lack of customer contact by headquarters personnel
- Confusion over uncoordinated projects
- Field feels dumped on

INPUT

Question 4
Conclusions

- For the most part, a recognition of proper mix of responsibilities
- Insufficient effort at mutual understanding
- Need for closer lines of communication

Question 5

How do these approaches affect morale and career path?

- Most common answer: no effect

INPUT

Question 5
Positive Comments

- Growth opportunities established in field group
- Career path depends on proposal performance
- Centralized approach avoids the problem (from a very large company)
- Dedicated federal organization has its own career path

Question 5
Negative Comments

- Moving between locations for proposal development damages morale
- Matrix management hurts accountability and performance reviews
- Field offices often frustrated in assembling the necessary team
- Central office loses sight of some programs, leaving field staff out of career growth

Question 5
Negative Comments

- Field offices, in general, want more authority
- Many field offices have no career paths established, causing high attrition
- Disagreement between HQ and field is continuous, leading to morale and productivity problems

Question 5
Conclusions

- Matrix management can definitely lead to morale problems
- HQ needs to stay aware of field office activities
- On-site client support should provide a fast track to advancement
- Relationships require tight, adroit management

Question 6

If you win a proposal, does the proposal manager's organization normally take responsibility for fulfillment?

Yes	12	No	9
Both	3	Don't Know	1

Question 6
Comments

- "No" answers
  - Sales representatives all report to HQ
  - Centralized proposal effort
  - Mostly, a dedicated fulfillment organization
  - Proposal resources pulled from all parts of company

Question 6
Comments

- "Yes" answers
    - Top management oversees work allocation
    - Key personnel from organization; extra staff recruited
    - Proposal manager
        - ° Wins the business
        - ° Owns the business
        - ° Grows his/her organization

INPUT

Question 6
Conclusions

- No consistent pattern
- Any available (and usable) resource grabbed
- Depends on centralized/decentralized approach

INPUT

Conclusions

- Many approaches work
- Each has pluses and minuses
- Management concern and attention always required
- Stronger intracompany communication also required
- Highly dependent on company size, products, services, and culture

Competitive Pricing Strategies

Overview

- Introduction
- Data collection process
- Questionnaire results
- Contracts identified
- Personal experience
- Conclusions

Introduction

- Statement of work factors
  - Uncompensated overtime
  - Separate cost centers
  - Use of new grads/junior people/retired government personnel
  - Fringe policies
  - Use of consultants/part-timers
  - Small business considerations
  - Academia
  - Use of GFE facilities, supplies, etc.

Introduction

- Very high level of price competition
  - Engineer at $7.29/hour
- Importance of price in contracts
- Risk of buy-ins
- Need to work the system

Data Collection Process

- Same as firms surveyed
- Two additional questions
- Would never ask actual rates
- Library search

Question 7

Do you ever use any of the following pricing strategies in federal bids?

	Yes	No
• Uncompensated overtime	____	____
• Separate cost centers	____	____
• Separate overhead structures	____	____
• Use of part-time personnel	____	____
• Use of low-priced subcontractors	____	____
• Use of GFE facilities and supplies	____	____
• Other (please specify)	____	____

INPUT

Question 7
Results

	Uncompensated Overtime	Separate Cost Centers	Separate Overhead Structures
Yes	8	13	12
No	11	8	9
No Comment	2	1	1
Don't Know	4	3	3

Question 7
Results

	Part-Time Personnel	Low-Price Subcon-tractors	GFE Facilities/ Supplies
Yes	14	17	17
No	8	5	4
No Comment	0	0	0
Don't Know	3	3	4

INPUT

Question 7
Conclusions

- Uncompensated overtime
  - Add the no comment, making split nearly even
  - Included all 8(a) firms
  - Remainder all professional services firms
  - Growing recognition of need for this

Question 7
Conclusions

- Separate cost centers
  - More popular
  - Especially common in federal market
  - Need to differentiate from commercial work
- Separate overhead structure
  - Also popular
  - Very useful for different types of employees
  - Easily managed

Question 7
Conclusions

- Part-time personnel
  - Especially in lower levels
  - Fairly wide acceptance
- Low-price subcontractors
  - Very high acceptance
  - Increases flexibility
  - Not used by Litton in ISEPD
- GFE facilities/supplies
  - Generally dictated by government

Question 8

To the extent that you answered "Yes" to the above question, how do you manage the risks?

Question 8
Comments

- Standards reduce risk
- Subcontractors have fixed prices
- We know and monitor the risk
- Risk priced in (multiple)
- Very carefully (multiple)
- Good management, planning, and implementation (multiple)
- Good morale reduces risk
- Use only when needed to win

Question 8
Conclusions

- Most answers given with little thought
- Possibly a lack of problem recognition
- Thoughtful answers
  - Standards
  - Morale
- Probably no easy answers

Contracts Located

- Labor Department/CDSI
- Navy (Pt. Mugu)/Unknown
- State (FAIS)/PRC
- Indicated steps
  - FOIA dozens of contracts
  - Build rate data base, cross-referenced by
    - Agency
    - Vendor
    - Labor category

INPUT

Labor/CDSI

• Project manager	34.17
• Senior data communications specialist	23.94
• Communications systems programmer analyst	17.21
• Senior network control technician	15.89

Labor/CDSI

• Journeyman network control technician	11.23
• Senior LAN specialist	17.71
• Senior ADP specialist	25.29
• Senior systems programmer	28.33

Navy (Point Mugu)

• Requirements evaluator	69.96
• Program manager	68.31
• Systems designer	56.51
• Systems analyst, senior	52.19
• Systems analyst	44.79

Navy (Point Mugu)

• Configuration management analyst	46.86
• Project manager	41.96
• Programmer/analyst	37.45
• Programmer	34.36

State/PRC

• Program manager	69.42
• Project manager	63.56
• Senior comp. systems analyst	60.62
• Senior information specialist	66.35
• Senior telecom specialist	66.19
• Data base management specialist	52.60

State/PRC

• Office automation specialist	63.30
• Lead analyst/programmer	50.04
• Programmer	35.23
• System software specialist	57.89
• System manager	39.32

Personal Experience
The Problem

- To attract and retain good people
  - Offer good salary
  - Offer good benefits
  - Offer advancement opportunities
- Government requires good support
- Government (often) not willing to pay for it
- Competition becoming cutthroat

INPUT

Personal Experience
The Solution

- Pricing flexibility
  - Through methods previously discussed
- Comprehensive competitive intelligence
- Comprehensive client intelligence
- Willingness to play games

Personal Experience

- My rate on DLA contract
  - Undiscounted: $72.00
  - Normally bid: $57.60 (for 50-hour week)
  - Normally delivered: $48.00 (for 60-hour week, especially on-site DLSC and DAASO)

Personal Experience

- Four overhead structures
  - My high rate
  - ITP program for new hires
  - Wage grade structure for clerical support
  - Different office locations
- On-site work reduced overhead further

Personal Experience

- On bidding projects
  - Option to lease in Upper Marlboro
  - Heavy loading of low-priced labor in benchmarks
  - Very optimistic assumptions on labor mix
  - Rarely used low-priced subcontractors (referred to as "Kelly Girl" approach)
  - Tight, formalized bid/no-bid criteria

SBA Bid
Approximate Rates

	Base	Multiplier	Total
Project manager	18.72	2.1	39.31
Senior technical advisor	18.11	2.1	38.03
Task manager	17.45	2.1	36.65
Acquisition analyst	11.09	2.1	23.29
Requirements analyst	11.77	2.1	24.72
Cost analyst	10.26	2.1	21.55
Secretary	6.71	2.1	14.09

SBA Bid Labor Mix (Phase I)

	Hours	Total
Project manager	350	13,759
Senior technical advisor	280	10,648
Task manager	1,350	49,478
Acquisition analyst	1,030	24,092
Requirements analyst	2,000	23,540
Cost analyst	0	0
Secretary	192	2,705
		124,222

INPUT

SBA Results

- ODCs brought total to $180,000
- Lost to Vitro on price
- SBA terminated Vitro after first phase

Conclusions

- Various techniques probably unavoidable
- Only minor company culture changes
- Commitment to:
  - Competitive analysis
  - Pre-positioning
  - Gamesmanship
  - Risk
- Greatest need: maximum pricing flexibility

Leftover Issues

- Overcoming incumbency
- Customer differences

Overview

- Overcoming incumbency
  - The problem
  - Processing to a solution
- Evaluation differences
  - DoD vs civilian
  - Agency examples
  - Conclusions

The Problem

- Contractual culture
  - Familiarity with incumbent
  - Mutual understanding
  - Maximum client contact
  - Tradition of unfunded support
- Outsider position
  - Always less knowledge
  - Always less contact
  - Marketing an incremental expense

INPUT

Process to a Solution

- Competitive analysis
  - Know the contract
  - Know available similar contracts (contract data base)
  - Know company organization, trends, global issues
- Client analysis
  - Know the decision makers
  - Know the decision contributors
  - Know the hot buttons

INPUT

Process to a Solution

- Contract performance
  - What does the incumbent do well?
  - What not so well?
  - Who likes or does not like the incumbent?
  - Why?
- Bid/no-bid decision
  - Is incumbency an asset or liability?
  - If an asset, no-bid
  - If a liability, assess
    - ° Depth of weaknesses
    - ° Feasibility of ghosting the weaknesses

Process to a Solution

- Ghosting the weaknesses
  - Identifying and documenting them
  - Subtle references throughout proposal
  - Assume evaluator takes the hint
- Stressing our strengths
  - Why will Litton do better?
  - What are our distinguishing factors?
  - Again, subtlety is very important
- Go for it

Evaluation Differences

- DoD general policies
  - More formalized, uniform process
  - Influence of LCM policies
  - More highly organized
  - More formally staffed
  - Longer
  - Former DAR restrictions
  - Less information available to bidders

INPUT

Evaluation Differences

- Civilian general policies
    - Far less formalized and uniform
    - Little similarity between agencies
    - Rarely a formal source selection organization
    - Usually more information provided
    - Usually easier to propose

Air Force Examples

- Software modernization
  - Technical
    - ° Management approach
    - ° Requirements analysis
    - ° Software design
    - ° Technical expertise
    - ° Functional expertise
  - Cost
    - ° Reasonableness
    - ° Realism
    - ° Risk
  - Impossible to self-evaluate

Air Force Examples

- AFCAC 251 (primarily hardware)
  - Technical
    - User friendliness and integration
    - System performance
    - System design
    - Security
  - Cost
    - Life cycle present value
  - Management
    - Past performance
    - Project administration
    - Maintenance
    - Training

Air Force Examples

- Strategic War Planning System
  - Technical
    - Integration
    - Hardware design and engineering
    - Software, maintenance, and training
  - Management
    - Integration
    - Project administration
    - Related experience
  - Cost
    - Life cycle present value cost (certainly no check for reasonableness)

Air Force Examples

- Global weather central
  - Technical
    - System integration
    - Effectiveness
    - Security
    - Performance
    - Transition
    - Project management
  - Cost
    - Life cycle present value costs

INPUT

Army Examples

- Milpercen 80X
  - Priority stated
    - Technical
    - Cost
    - Management
  - Technical
    - System architecture
    - Software
    - Telecommunications
    - Interactive environment
    - Technology refreshment
  - Cost
    - Life cycle present value
    - Realism
  - Management
    - Corporate quals
    - Individual quals

Army Examples

- CALS
  - Technical
    - Concept design
    - Demonstration
    - Development
    - Fielding
    - Engineering management
    - Quality assurance
  - Cost
    - Actual cost
    - Cost realism

Army Examples

- RCAS
  - Technical
    - Mission suitability
    - Technical
    - Logistics
    - Management
  - Cost
    - Total life cycle cost

INPUT

Army Examples

- PERMS
  - Priority stated
    - Technical
    - Cost
    - Management
  - Technical
    - Order of precedence established
    - Usual items
  - Cost
    - Life cycle
  - Management
    - Specifies equal subfactors
    - Usual items

INPUT

Army Examples

- Intelligence agency life cycle architecture support
  - Extremely detailed weighting
  - Technical four times the weight of cost
  - Detailed weighting relationships within technical
  - Usual factors

Army Examples

- ISSC-TSS
  - Descending importance
    - ° Technical
    - ° Management
    - ° Cost
  - Usual factors

INPUT

Other DoD Examples

- DCA: Worldwide on-line system
  - Pure hardware buy
  - Total rating on lowest cost
- DCA: National emergency telecom service
  - Priority: Management, technical, cost
  - Usual factors

INPUT

Other DoD Examples

- DIA: "21 victor follow-on"
  - Technical = 1.5 times management
  - Management = twice cost
  - Live test demonstration included
- DoD: Champus facilities management
  - Technical = 75%
  - Price = 25%

INPUT

Other DoD Examples

- DLA: Autodin/TCC
  - Performance potential = twice technical
  - Technical = twice management
  - Management = cost
  - Usual factors
- Navy: PC-LAN
  - Technical/cost usual factors
  - No weights provided

INPUT

Other DoD Examples

- NAVSEA: CAD II
  - Technical: most important
  - Price: significant factor
  - Management: significantly less important
- NAVSUP automated information system
  - Price only

INPUT

GSA Examples

- IPDC-90
  - Mandatory requirements = subjective technical factors
  - LTD weighted less
  - Experience, past performance weighted still less
- ASP
  - Technical response = twice management plans
  - In descending order
    - ° System maintenance
    - ° Technical plans and procedures
    - ° Evolution of ISDN

INPUT

GSA Examples

- PBS/IS
  - Technical: usual factors
  - Cost (without relative weights)
- GSA systems
  - Mandatory requirements = subjective technical factors
  - LTD comes next
  - Experience = past performance = general factors

NASA Examples

- SSC mission support contract
  - Understanding and technical approach
    - ° 500 points
    - ° Details provided
  - Management: 250 points
  - Resources: 250 points
  - Cost
  - Relevant experience
  - Other factors

NASA Examples

- Real-time simulation processors
  - Mission suitability (with details) = price = experience
  - Other considerations less important
- Lewis ADP system support services
  - Mission suitability (with details) = cost
  - Less important
    - Experience
    - Other factors

INPUT

Other Civilian Examples

- Commerce, National Weather Service: AWIPS 90
  - Combined technical/management rating
  - Life cycle costing factors
- Commerce/NOAA: automated nautical charting system II
  - Again, combined technical/management rating
  - Cost/present value analysis

Other Civilian Examples

- EPA workstation automation
  - Lot 1: technical quality = cost
  - Lot 2: technical quality exceeds cost
  - Other factors
- HHS/SSA: SI and management services
  - General capabilities = technical
  - Cost not mentioned

Other Civilian Examples

- HHS NIEHS support services
  - Detailed technical breakdown

	Percent
° Management approach	35
° Technical understanding	25
° Key personnel	15
° Contractor transition	15
° Relevant experience	10

Other Civilian Examples

- HUD: HIIPS
  - Technical: 650 points
  - Management: 350 points
  - Other: 125 points
  - Cost: not numerically scored, but important
- Justice, civil division: office automation system
  - Technical 60%

	Percent
° Desirable	50
° Management plan	30
° LTD	20

  - Cost 40%

INPUT

Other Civilian Examples

- Justice, INS microcomputer procurement
  - Low bidder must pass LTD
- Labor, ERISA electronic data base
  - Technical award points = tech score X100/ highest technical score
  - Price award points = lowest evaluated price X100/ offerer's evaluated price
  - Detailed breakout of technical factors

Other Civilian Examples

- Transportation, FAA CORN
    - Technical and cost have equal weight
    - Unweighted technical components
- Transportation, FAA OATS
    - Cost slightly more than technical
    - Technical much more than business management
    - Business management

INPUT

Other Civilian Examples

- Treasury TMAC
  - Technical 200 points
    - ° Technical features 100 points
    - ° Management support features 100 points
  - Cost not scored

INPUT

Conclusions

- Air Force apparently hardest to understand
- Army somewhat easier
- Civilian agencies
  - Generally easier
  - Pattern somewhat inconsistent

INPUT

Case Study: Cost vs. Technical

Assume

- Technical = 60%
- Cost = 40%
- Vendor A's technical (except training and maintenance) = 57 points
- Vendor B's technical (except training and maintenance) = 57 points
- Training is weighted at 2 points
- Maintenance is weighted at 1 point
- Vendor A gets maximum credit for training and half credit for maintenance
- Vendor B gets half credit for training and maximum credit for maintenance

Then technical scores are as follows:

Evaluation Area	Maximum Points	Vendor A	Vendor B
Training	2	2/2 X 2 = 2	1/2 X 2 = 1
Maintenance	1	.5/1 X 1 = .5	1/1 X 1 = 1
Total	3	2.5	2
Overall Score	60	59.5	59.0

Cost Evaluation: Alternative 1

Assume

- Vendor A bids $5.00
- Vendor B bids $4.90

Cost Evaluation

Evaluation Area	Maximum Points	Vendor A	Vendor B
Cost proposal 1	40	4.90/5.00	4.90/4.90
Total	40	.98 X 40 = 39.2	1 X 40 = 40

Overall Evaluation

Evaluation Area	Maximum Points	Vendor A	Vendor B
Tech proposal	60	59.5	59
Cost proposal 1	40	39.2	40
Total	100	98.7	99

- Vendor B wins

Cost Evaluation: Alternative 2

Assume

- Vendor A bids $5.00
- Vendor B bids $4.95

Cost Evaluation

Evaluation Area	Maximum Points	Vendor A	Vendor B
Cost proposal 2	40	4.95/5.00	4.95/4.95
Total	40	.99 X 40 = 39.6	1 X 40 = 40

Overall Evaluation

Evaluation Area	Maximum Points	Vendor A	Vendor B
Tech proposal	60	59.5	59
Cost proposal 1	40	39.6	40
Total	100	99.1	99

- Vendor A wins
- If training and maintenance were weighted equally, then vendor B would have won
- The decision to weight training higher costs the government an extra five cents; looking at it another way, vendor A can bid five cents more because of superior training plan

Suppose Technical is Relative

At close score, it makes no difference

At non-close score, the result changes:

- Suppose
  - Vendor A totals 52 points
  - Vendor B totals 48 points
- Then
  - Absolute difference = 4 points
  - Relative difference
    - ° Vendor A: 52/52 X 60 = 60 points
    - ° Vendor B: 48/52 X 60 = 55.4 points
- Difference is 4.6 points, which could shift the winner in a close cost evaluation

Absolute cost evaluation will not matter unless the government's economic analysis is off by more than 20%